

Redundancy: when plenty is just enough

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“Shortage” has become a central and recurring theme during the COVID-19 pandemic, whether reflected in materials or consumables that include personal protective equipment (PPE), or in human resources.

The effects that resulted from shortages of essential consumables and materials demonstrated the influence supply-and-demand has on costing, on planning, and on our service-delivery efficiency in the past three months.

In various practices and clinics, this theme has highlighted the benefits of creating redundancy in systems and in different resource types. Redundancy has benefits that extend to infection control, to materials and consumables management, to the communication between the patient and practitioner and between staff members, to time management, and to the overall management of human resources.

Redundancy in systems can be structured to benefit different dental settings. An example is the way in which some clinics use a rostering and/or rotational staffing system during the COVID-19 pandemic. Redundant and semi-redundant systems in terms of short-staffed scenarios can see an improvement of service delivery by overlapping shifts for rotating staff, thus ensuring shorter shifts for the same number of staff members, achieving the desired service levels and achieving treatment goal, but at the same time minimizing the risk for potential exposure to SARS-CoV-2.

Layering of such semi-redundant systems can compensate for staff shortages in case one or more are unavailable to perform their essential services.



Similarly, data-redundancy ensures security and accuracy in communication, in information access and in delivering outcomes. This creates efficiency in the clinical setting, whether writing a referral letter, performing a procedure, or even billing a patient.

By layering redundancy into practice systems, the consistency of service delivery is reinforced. Consistency provides both the patient and clinician with a sense of security and does not leave either vulnerable to uncertainty. The trust-relationship between clinician and patient will benefit from consistency and security, especially when the practitioner is able to focus on the service they provide and is not distracted by any shortage or unnecessary risks.

Patients will require access to oral healthcare during the pandemic. The availability of the dental practitioner to treat patients is therefore vital. Patients who present with pain and sepsis often require assessment and treatment outside of normal working hours.

Performing this essential treatment will only be possible if there are no voids in systems and resources. Layering redundancy into communication systems for example, ensures that no patient is left unattended. It additionally ensures that all staff are aware of current situation/status of the clinic or practice.

Redundancy in systems and in resources therefore increases professionalism and the ability to perform our duty with accuracy. In the time of COVID-19, we want to do so safely, knowing that the safety-net of redundancy will be there to compensate for unforeseen eventualities making it deliberate and essential.